Alternative Narrowing Process

Chain of Lakes

Alternative 3F

Alternative 3F, "Chain-of-Lakes", utilizes a connected chain of up to eight lakes, created by flooding Delta islands, that would convey water via siphons beneath Delta channels to Clifton Court Forebay. An enlarged Delta Cross Channel would include a new intake facility capable of diverting 10,000 cfs through new fish screens. All or a major portion of seven Delta islands would be converted to storage and conveyance facilities. Siphons would convey water under river and slough crossings to Clifton Court Forebay. Distributed pump stations with cylindrical fish screens (total capacity 5,000 cfs) would be added to facilitate filling of islands from adjacent channels and returning flow from storage along the conveyance route.

The conveyance facility in alternative 3F is compared to the large isolated facility (15,000 cfs) in alternative 3E with in-Delta storage

Chain-of-Lakes (Alt 3F)	Large Isolated plus in-Delta storage (Alt 3E)
Replace diversion at Delta Cross Channel and small distributed screens with a screened intake on Sacramento River at Hood (15,000 cfs capacity) to reduce tidal influence and impacts on resident Delta Species.	15,000 cfs screened intake at Hood
Provides operational storage to the pumps. Maximum storage is 825 TAF with a usable storage of approx. 174 to 200 TAF.	In-Delta storage provides 180 to 200 TAF of operable storage to the pumps.
Compared to other alternatives, requires the most extensive land use conversion of in-Delta prime agricultural land, ecosystem habitat and future habitat restoration areas.	Impacted acreage is mostly prime agricultural land.
Impacted acreage: 37,000 acres	Impacted acreage: 18,728
Net Evaporation Loss: 18,000 to 36,000 Ac-ft year	Net Evaporation Loss: 9,000 to 18,000 Ac-ft year
Could create TOC problems in treatment of export drinking water.	Has operational flexibility to use isolated facility and/or storage in takes
Capital Cost: \$2,367 Million	Capital Cost: \$1,712 Million

Recommendation

Given that the chain-of-lakes conveyance/storage has the most extensive land use conversion of in-Delta prime agriculture land, ecosystem habitat, and future restoration areas and that options are available that achieve the same objectives at substantially reduced cost, it is recommended that alternative 3F be dropped from consideration.

Draft - For Discussion Only

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